### § 195.214

- (3) On pipe containing a longitudinal weld, the longitudinal weld must be as near as practicable to the neutral axis of the bend unless—
- (i) The bend is made with an internal bending mandrel; or
- (ii) The pipe is 12¾ in (324 mm) or less nominal outside diameter or has a diameter to wall thickness ratio less than 70
- (c) Each circumferential weld which is located where the stress during bending causes a permanent deformation in the pipe must be nondestructively tested either before or after the bending process.

[Amdt. 195–22, 46 FR 38360, July 27, 1981, as amended by Amdt. 195–52, 59 FR 33396, June 28, 1994; Amdt. 195–63, 63 FR 37506, July 13, 1998]

### §195.214 Welding: General.

- (a) Welding must be performed by a qualified welder in accordance with welding procedures qualified to produce welds meeting the requirements of this subpart. The quality of the test welds used to qualify the procedure shall be determined by destructive testing.
- (b) Each welding procedure must be recorded in detail, including the results of the qualifying tests. This record must be retained and followed whenever the procedure is used.

[Amdt. 195–38, 51 FR 20297, June 4, 1986]

#### § 195.216 Welding: Miter joints.

A miter joint is not permitted (not including deflections up to 3 degrees that are caused by misalignment).

## § 195.222 Welders: Qualification of welders.

Each welder must be qualified in accordance with section 3 of API Standard 1104 or section IX of the ASME Boiler and Pressure Vessel Code, except that a welder qualified under an earlier edition than listed in §195.3 may weld but may not requalify under that earlier edition.

[Amdt. 195–32, 49 FR 36860, Sept. 20, 1984, as amended by Amdt. 195–38, 51 FR 20297, June 4, 1986]

#### § 195.224 Welding: Weather.

Welding must be protected from weather conditions that would impair the quality of the completed weld.

### § 195.226 Welding: Arc burns.

- (a) Each arc burn must be repaired.
- (b) An arc burn may be repaired by completely removing the notch by grinding, if the grinding does not reduce the remaining wall thickness to less than the minimum thickness required by the tolerances in the specification to which the pipe is manufactured. If a notch is not repairable by grinding, a cylinder of the pipe containing the entire notch must be removed.
- (c) A ground may not be welded to the pipe or fitting that is being welded.

# § 195.228 Welds and welding inspection: Standards of acceptability.

- (a) Each weld and welding must be inspected to insure compliance with the requirements of this subpart. Visual inspection must be supplemented by nondestructive testing.
- (b) The acceptability of a weld is determined according to the standards in section 6 of API Standard 1104. However, if a girth weld is unacceptable under those standards for a reason other than a crack, and if the Appendix to API Standard 1104 applies to the weld, the acceptability of the weld may be determined under that appendix.

[Amdt. 195–22, 46 FR 38360, July 27, 1981, as amended by Amdt. 195–52, 59 FR 33397, June 28, 1994]

# §195.230 Welds: Repair or removal of defects.

- (a) Each weld that is unacceptable under §195.228 must be removed or repaired. Except for welds on an offshore pipeline being installed from a pipelay vessel, a weld must be removed if it has a crack that is more than 8 percent of the weld length.
- (b) Each weld that is repaired must have the defect removed down to sound metal and the segment to be repaired must be preheated if conditions exist which would adversely affect the quality of the weld repair. After repair, the segment of the weld that was repaired